REMARKS

Claims 1-9 are all the claims pending in this application.

Claim 1 is rejected under 35 U.S.C. §103 (a) as being unpatentable over Ganapathy (6,411,953) in view of Okuno (6 428,566).

Claims 2-3 have been rejected under 35 U.S.C. §103 (a) as being unpatentable over Ganapathy and Okuno and further in view of Barbara (5,710,916).

Claims 4-9 have been rejected under 35 U.S.C. §103 (a) as being unpatentable over Ganapathy, Okuno, Barbara and further in view of Castelli (6,122,628).

The Applicants traverse the rejections and request reconsideration.

Claim 1 required performing similarity measurement on a given **query vector** within the feature **vector space**. It further requires applying search conditions limited by the results of the similarity measurement and performing a changed similarity measurement on the given **query vector**.

The Examiner admits that Ganapathy does not explicitly teach performing a changed similarity measurement on a given query vector. However, the secondary reference Okuno is alleged to be overcoming this deficiency. The Applicants respectfully submit that the Examiner is making an unreasonable leap in contending that Okuno suggests performing a changed similarity measurement on the given **query vector.**

Specifically, Okuno has no teaching about a **query vector** or a **feature vector space**. Therefore, it cannot be considered to be teaching performing changed similarity measurement on the query vector. The Examiner specifically refers to steps S1003 and S1004 of Okuno in support of his arguments.

The Okuno reference deals with a technique for re-adding comments from an original document to a revised document (see generally, Okuno, Abstract). In Fig. 21 A-B, some of the steps used in Okuno are discussed. In this connection, Okuno initially extracts a character string from a first document (see Okuno 15:63-65). The length of the extracted character string is based on a numerical value, termed by Okuno as "similarity" (see Okuno 15:56). This character string is then compared with lines in the second document. Depending on whether a broader or a narrower search is desired, the "similarity" numerical value is increased or decreased. This character string is the only means of comparison between the documents.

Such a character string, as used in Okuno, cannot be considered to be a **vector** by any stretch of imagination. A vector by definition is multi-dimensional. A feature vector (as well as the query vector) is such a multi-dimensional entity. The character string in Okuno can at best be considered to be scalar, since it has only one dimension.

Further, any skilled artisan in this art will know that making changes in a multi-dimensional vector is far more complicated than making changes in a single-dimensional entity like a character string. The Examiner is making an unreasonable leap when he contends that a simple character string as used in Okuno and the adding/removing characters to the string, suggests a multi-dimensional feature vector (and a query vector) and the changes made to such a vector.

Therefore the combined teachings of Ganapathy/Okuno are deficient at least because they do not suggest performing a changed similarity measurement on the given **query vector.**

Further, Ganapathy teaches away from making a changed similarity measure. In Ganapathy, the similarity measurement is based on a vocabulary and a grammar determined through experimentation (see generally, Ganapathy 3:55-60). In such a technique, similarity of pairs of objects is obtained by asking people to rank similarity. The similarity measures are then place in a matrix after averaging (see generally, Ganapathy 4:8-17). As can be seen, changing such a similarity measure is extremely difficult, arguably involving performing the experimentation again. In fact, Okuno touts the elimination of user interaction as a major advantage (see generally, Okuno 3:10-14). Therefore, Ganapathy clearly teaches away from changing the similarity measurement.

Claim 1 should be allowed at least because the combine teachings of Ganapathy/Okuno do not suggest performing a changed similarity measurement on the given query vector.

Claims 2-9 are dependant on claim 1 and are allowable, at least for reasons analogous to the ones noted above. Further, the additional references cited, namely, Barabara and Catelli, do not overcome the deficiencies noted above in the teachings of Ganapathy/Okuno.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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